

Our disasters, 'their' management

Need to break the chain of complacency and 'not questioning'



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KEY POINTS

1. Bangladesh's disaster management has advanced institutionally but remains constrained by top-down decision-making.
2. Community engagement remains weak despite its critical role in effective disaster response.
3. Indigenous knowledge, long central to resilience, has been increasingly marginalised.
4. Colonial and donor-driven interventions often produced serious unintended consequences.
5. Sustainable resilience requires inclusive, people-centred, and locally grounded approaches.

subnational levels, underscoring the need for continued policy implementation, community engagement, and international cooperation to build long-term resilience.

The evidence and urge for consulting the local people on the preparedness mechanism is almost nil. The tendency of ignoring the native expertise and local wisdom to combat natural or complex disasters creates problems rather than strengthening the capacity of fighting back. People living in this land are not stupid people.

Khana was not the only person who had the capacity of predicting weather and crop yields. In fact, people living in this disaster-prone delta are known for their rich indigenous knowledge and nature-based solutions. This knowledge and wisdom developed over thousands of years. They know how to live with abundant water and to protect life when water is scarce. With their indigenous knowledge, they cope with cyclones and erratic weather conditions (changes in climate). Traditional practices like raised homesteads, floating gardens, selecting the

right seeds and keeping them in the right places created the backbone of resilience. Folk wisdom helps them to build community resilience, even when formal aid is delayed. This local wisdom, passed down through generations, includes understanding local ecosystems and developing unique survival techniques, making them highly adaptable to frequent natural hazards.

Khana (or Khona), the legendary poet, philosopher and astrologer from medieval Bengal (9th-12th century CE), is famous for her insightful couplets. Khanan Bachan, offering practical advice on agriculture, health and daily life, deeply rooted in Bengali rural wisdom and folklore, with tales linking her to the astrologer Mihir. She is a key figure in Bengali culture, known for her prophetic accuracy in predicting weather and crop yields, and her sayings (Bachan) are still followed by farmers today.

With the aggression of colonisation, we started undermining local culture, wisdom, and indigenous knowledge. We devalued the golden heritage of our resilience capacity. We also forgot the needs of the people; rather, we



To swiftly assess the magnitude of disasters and address gaps in the government's response capacity, cooperation with the Department of Disaster Management is essential to ensure accurate information.

FILE PHOTO: STAR

are building on the foundations laid by the past masters. Here we will examine some of our disaster management instruments to see how much they are helping, firing back, or creating a more vulnerable situation for the country and the people. To begin with, we can discuss the cyclone warning system. Ports and ships were much more important to the rulers than the people of the land. After the partition of 1947 and our independence in 1971, our cyclone signals are still primarily issued for seaports and seagoing vessels to indicate the intensity of a storm, its possible direction, and the level of impending danger.

For cyclones, we have 11 signals. They are:

- Distant Cautionary Signals: 1, 2, 3 (forecast of squally weather or a storm).
- Local Cautionary Signal: 4 (a storm is approaching, but the danger is not yet severe).
- Danger Signals: 5, 6, 7 (a storm is approaching or moving toward the port).
- Great Danger Signals: 8, 9, 10 (a severe or very severe storm is approaching; final and highest level of warning).
- Communication Failure Signal: 11 (communication disrupted; actions to be taken based on local judgment).

All Danger Signals (5, 6, and 7) refer to wind speeds of 62-88 kph, while Great Danger Signals (8, 9, and 10) refer to wind speeds of 89 kph or more. To make it clearer, Signal No. 5 means the storm will pass leaving the port on its left side; Signal No. 6 means the storm will pass leaving the port on its right side; and Signal No. 7 means the storm will pass directly over the port or very close to it. The water vessel operators (Sarang or Captain) can easily translate that and take the necessary action. But the general people can hardly understand the background of why 5,

6, 7 refer to the same wind speed. So, when the signal suddenly shifts from 5 to 8, they become confused and lost. The same applies to the Great Danger Signals.

Contrary to our eleven signals, the Philippines managed their cyclones (they face more cyclones than we do) with only five signals, with a higher signal number associated with higher general wind strength and shorter warning lead time. We all know this but still love to stick with what our colonial masters introduced.

After the partition of India, many of our development and vulnerability reduction projects were also prescribed by agencies who lent the money. Among them, here I would like to discuss two such initiatives:

- a) Introduction of Polders and Ring Embankments
- b) Introduction of Malaria Eradication Programme

INTRODUCTION OF POLDERS AND RING EMBANKMENTS

In the name of preventing tidal flooding, controlling salinity, and enabling year-round crop cultivation in the coastal area, polders and ring embankments were introduced under the Coastal Embankment Project (CEP, 1960s and 1970s) with technical and financial support from international development partners. These structures enclosed large tracts of low-lying land with earthen embankments and sluice gates. In the initial years, the intervention led to increased agricultural output and improved livelihood security, but over the years, it proved to be a counterproductive exercise and created irreversible damage to nature and livelihoods.

Over time, however, the south-west region began experiencing severe waterlogging, particularly from the 1980s onward. Large areas remained inundated for months or even years, damaging crops, infrastructure, and settlements. Waterlogging emerged due to several interconnected factors:

DISRUPTION OF NATURAL SEDIMENTATION

Embankments prevented tidal flows from entering floodplains, stopping natural sediment deposition inside polders. Meanwhile, sediment continued to accumulate in riverbeds, causing river channels to become shallower.

Reduced River Drainage Capacity

Silted riverbeds lost their ability to drain monsoon rainfall effectively, leading to prolonged stagnation of water inside polders.

Malfunctioning Sluice Gates

Poor maintenance, siltation, and mismanagement of sluice gates reduced their effectiveness in releasing excess water.

Land Subsidence

Enclosed polders experienced gradual land subsidence, making them lower than surrounding river levels and further aggravating drainage congestion. Increased risk of certain cancers Hormonal and endocrine disruption Reproductive and developmental health problems.

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